

A Scale to Measure Managerial Ability for Veterinary Officers

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ABSTRACT

Indian agricultural sector is vast & has continued to be the backbone of our economy. Keeping milch animals has been never a separate occupation from agriculture. So, importance of animal husbandry department is as importance as other enterprise. The progress prosperity & success of animal husbandry enterprise mainly depended on the managerial role played by the veterinary officers. Management means use of people, money, equipments, materials & methods in other words, the task of management means fitting together man, material & money. The veterinary officer's, are important link in the hierarchy of different workers in the organization. They are the perform important role to implement the different programmes as they work as a bridge between the Livestock Inspectors (LIS), cattle owners & higher authority. Moreover, the veterinary officer perform many function's in carrying out the best performance such as preparing plan of work, co-ordination with authority & subordinates, taking decision, communication etc. All the above function are involve one or the other way in managerial components via, planning, organizing, Directing, Communicating supervising, co-ordinating & decision making. .

Keywords: Managerial ability, veterinary officers

INTRODUCTION

Every enterprise basically is interested in increasing productivity. The animal husbandry being an enterprise is not an exception to this. The veterinary officers as the manager of the animal husbandry department/ enterprise are expected to bring about maximum profit with available resources. How the VOs fulfils this expectation is the test of their managerial ability. The progress, prosperity and success of animal husbandry enterprise mainly depend on the managerial role played by the VOs.

In broader sense, management means use of people, money, equipment, materials and methods. In other words, the task of management means fitting together man, material and money. The Veterinary Officers are important link in the hierarchy of different workers in the organization. They are

the backbone to implement the different programmes as they work as a bridge between the Livestock Inspectors (LIs), cattle owners and higher authorities. Thus, the success of Animal Husbandry Department depends upon the managerial ability of VOs.

The livestock enterprise plays an important role specifically in the rural economy. It provides a stable and well-distributed income throughout the year (Jakhar-1992). Today animal husbandry enterprise is becoming more complex and complicated and therefore management is a key to face these problems. There is an urgent need to develop sustainable livestock production system under mixed farming.

Broadly speaking the management consists of major functions such as planning, organizing, directing, communicating, controlling, human relation, leading,

supervising, coordinating and decision-making. Numbers of studies have indicated the various functions of managements, but so far very few studies have made an attempt to study managerial ability in a systematic and scientific way at operational level. Therefore, in present research study attempt has been made to develop and standardize a scale to measure managerial ability of VOs. In present investigation, step-wise regression analysis was used to find out the relative importance of the various components of managerial ability scale.

METHODOLOGY

Develop and standardize a scale to measure managerial ability of veterinary officers

Selection of scale items

The Veterinary Officers have to perform many management functions. With this in mind, a good number of main indicators and sub- indicators pertaining to managerial ability were collected through relevant literature, correspondence with experts and discussing with management specialists and on the basis of past review. After this exercise 10 main indicators and 114 sub indicators reflecting managerial ability of Veterinary Officers were selected as possible indicators for managerial ability scale.

These indicators were then referred to 80 judges consisted of Deputy Director of animal husbandry working under district panchayat, and other Veterinary Officers, research scientists and extension educationist working in different State Agricultural Universities. The judges were requested to indicate whether each of the indicator and sub- indicator sent to them were relevant or not for inclusion in scale. At the same time, judges were requested to rank the main indicators and sub indicators according to their relative importance in measurement of managerial ability of Veterinary Officers. The response on relevancy and rank order was received from 60 judges. Finally, responses of all 60 judges were considered for the study.

Relevancy of scale items

The responses received from the judges supported the relevance of all the ten main indicators and 70 sub- indicators out of 114 sub- indicators. Those indicators that received more than 75 percent responses were considered as relevance for inclusion in the scale. The details on relevancy are furnished in Table-1.

Obtaining scale values

Based on the rank assigned by the judges to each of the selected main and sub- indicators, the scale values of all the main and sub- indicators were calculated by using the Normalized Rank Approach as suggested by Guilford (1954). A complete scale comprising of 10 main indicators and 70 sub- indicators along with their scale values and weightages is given in the reliability and validity of the managerial ability scale were determined by employing suitable methods.

Table 1 : Relevancy of main indicators and sub- indicators of the scale

Sr. No.	Main/ Sub- indicators	Relevancy	
		Number	Per cent
I	Planning	60	100.00
1	Determination of objectives	57	95.00
2	Plan for transfer of technology	56	93.33
3	Plan for utilization of funds/ Budget	56	93.33
4	Plan for extension work	58	96.67
5	Submission of report in time	56	93.33
6	Preparation of annual plan of work	57	95.00
7	Plan for monitoring of work	56	93.33
8	Plan for forecasting of diseases	56	93.33
9	Attending the visitors from time to time	57	95.00
II	Organizing	60	100.00
1	Provide work opportunity to the staff	58	96.67
2	Invite suggestions from subordinate	57	95.00
3	Arranging group meeting with cattle owners	58	96.67
4	Division of work	57	95.00
5	Arranging cattle camp at village level	56	93.33
6	Delegation of authority according to the responsibility	55	91.66
7	Demonstration of improved quality feed & fodder	55	91.66
III	Directing	57	95.56
1	Give clear and complete instructions	60	100.00
2	Provide technical guidance	60	100.00
3	Appreciation of good work	58	96.67
4	Give continuous information	58	96.67
5	Give credit to the person	56	93.33
6	Give proper direct instructions	55	91.66
7	Implementation of the decision	55	91.66

IV	Communicating	58	96.67
1	Instruction to fellow workers in time	60	100.00
2	Selection of proper medium of communication	58	96.67
3	Establishment of horizontal communication	55	91.66
4	Establishment of feed-back mechanism	60	100.00
5	Establishment of vertical communication	53	88.33
6	Circulation of latest information to subordinate	60	100.00
V	Controlling	57	95.00
1	Visit to subordinate	56	93.33
2	Inquiry about subordinate work	57	95.00
3	Keep a careful check on efficiency	57	95.00
4	Visit accurately and properly	56	93.33
5	Maintain self discipline	60	100.00
6	Reporting the work done	60	100.00
7	Take personal observation	58	96.67
VI	Human relation	60	100.00
1	Make personal contact with subordinate	60	100.00
2	Fairly dealing with the staff	58	96.67
3	Take interest in development of juniors	58	96.67
4	Providing co-operation	60	100.00
5	Adopt democratic way of behavior	56	93.33
6	Understanding personality	53	88.33
7	Consideration to all as a team	55	91.66
VII	Leading	56	93.33
1	Promote team work	60	100.00
2	Developing high group morale	56	93.33
3	Convince the higher authority	57	95.00
4	Inspiration to subordinate	57	95.00
5	Choosing right person for each job	58	96.67
6	Motivation of the staff for work	57	95.00
7	Maintaining discipline in the groups	49	81.66
VIII	Supervising	58	96.67
1	Provide skillful/ learned advice	58	96.67
2	Give suggestions properly	53	88.33
3	Focus on practical skills	60	100.00
4	Focus on quality of work	58	96.67
5	Take personal interest	57	95.00
6	Supervision and evaluation the work of subordinate	57	95.00
IX	Co-ordinating	58	96.67
1	Co-ordination with other department	58	96.67

2	Integration of work	60	100.00
3	Get co-operation from outside	56	93.33
4	Call a group meeting	58	96.67
5	Co-ordination through supervision	49	81.67
6	Co-ordination in time with other	58	96.67
7	Become a dynamic	57	95.00
X	DECISION MAKING	57	95.00
1	Decision at proper time	60	100.00
2	Find the facts for decision	58	96.67
3	Implementation of the decision	58	96.67
4	Bias less decision	58	96.67
5	Individual decision	47	78.33
6	Basic and routing decision	52	86.67
7	Identification and analysis of the problem	57	95.00

RESULTS AND DISCUSSION

Calculating the managerial ability index

For measuring the managerial ability of Veterinary Officer of VD centres, the scale developed for the purpose was applied to select VOs of VD centres on a three-point continuum with categories viz. 'Always', 'Sometimes' and 'Never'. The scores assigned to these categories were 2, 1 and 0 respectively. The formula used for calculating the managerial ability index (MAI) is as under:

$$MAI = \frac{\sum (\text{Score obtained for indicator} \times \text{Scale value of indicator})}{\sum (\text{Maximum score of indicators} \times \text{Scale value of indicator})} \times 100$$

$$MAI = \frac{\sum (OsI1 \times Rc1) + (OsI2 \times Rc2) + (OsI3 \times Rc3) \dots (OsI10 \times Rc10)}{\sum (MsI1 \times Rc1) + (MsI2 \times Rc2) + (MsI3 \times Rc3) \dots (MsI10 \times Rc10)} \times 100$$

Where,

OsI1 = Obtained score value of Planning

OsI2 = Obtained score value of Organizing

OsI3 = Obtained score value of Directing

OsI10 = Obtained score value of Decision Making

MsI1 = Maximum score value of Planning

MsI2 = Maximum score value of Organizing

MsI3 = Maximum score value of Directing

MsI10 = Maximum score value of Decision Making

Rc1 = scale value of Planning

Rc2 = scale value of Organizing

Rc3 = scale value of Directing
Rc10 = scale value of Decision Making
I = Indicator 1,2,3.....10
Rc = Scale value

Calculating the Reliability and Validity of the Developed Scale

Reliability

In order to measure the reliability of the scale, split half method was used; the scale was administered to 10 non-sampled Veterinary Officers. The score for the alternative indicators were separated and two sets were prepared. The coefficient of correlation was used for appraising correlation between the two sets of scores. The 'r' value was 0.742, indicating that the scale was reliable.

Validity of the scale

Validity of the scale was confirmed by two types of validity tests viz, content validity and criterion validity.

Content validity

According to Kerlinger (1976), the content validity is representativeness of sampling adequacy, of the content, the substance, the matter and the topics of measuring instrument. In the present study, indicators and sub- indicators included in the scale were arrived at only after wide and critical validation by panel of judges.

Criterion validity

A criterion may be an objective measure of performance or quality (Garrett, 1985). In the present study, criterion validity was measured by using criterion of academic qualification. Comparison was made between the managerial ability score of 10 non- sampled respondents with their respective academic qualification. Pearson's coefficient of correlation was used for appraising correlation between these two sets of scores. The 'r' value was 0.376, indicating that the scale was valid.

Measures of variability

Two measures of variability found out in the present study were:

Range

The highest managerial ability index was 96.78 and lowest was 62.32. The rang was therefore, found to be 34.46.

Standard deviation

The value of standard deviation for managerial ability index was found to be 8.91.

Relative Importance Of Different Components Of Managerial Ability Scale

A step- wise regression analysis was carried out to know the relative important variables with their predictive ability in explaining the variation in the dependent variable.

The 'F' values indicated that the six variables viz, family size, staff facility, departmental climate, job satisfaction, job stress and achievement motivation components of managerial ability scale were highly significant. The most two important variables were job satisfaction and departmental climate.

IMPLICATION

The findings of this study have both theoretical and practical implication. Theoretically, the findings of the present study add to knowledge about the managerial role in animal husbandry and practically it is useful in measuring the managerial ability of the VOs.

The managerial ability was positively and significantly related with experience on VD centre, management training received, interpersonal communication, departmental climate, personality, area of jurisdiction, job satisfaction, achievement motivation and job involvement.

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